

## REMARKS

Claims 3-6 have been added. Claims 1-6 remain. No new matter has been added.

The rejections and objections shall be taken up in the order presented in the Official Action.

2. Claim 2 currently stands rejected under 35 U.S.C. §102(e) for allegedly being anticipated by DE 3617827 (hereinafter "DE 827").

Claim 2 recites a method of measuring the noise contained in a picture. The method includes:

"receiving a picture signal and processing said picture signal to detect at least one homogeneous picture region (BR) of the picture;  
for the at least one detected homogeneous picture region (BR), measuring a high-frequency signal component (HP) contained in said picture signal; and  
determining the noise contained in the picture from the high-frequency signal component (HP) and providing a noise signal indicative thereof." (cl. 2).

This method determines a homogeneous picture region, determines a high-frequency signal component within at least one homogeneous picture region, and determines the noise contained within the picture from the high-frequency signal component.

The Official Action contends that the claimed feature of *"receiving a picture signal and processing said picture signal to detect at least one homogeneous picture region (BR) of the picture;"* is met by the alleged disclosure in DE 827 of *"a video signal is received (b) in which a measurement sample is formed consisting of a certain number of pixels in a line or in several lines in an arbitrary planar pattern (abstract), where the pattern includes as that in FIG. a."* (Official Action, pgs. 2-3). However, a fair and proper reading of the abstract of DE 827 and the figures (as understood) fails to reveal any detection of at least one homogeneous picture region. There is not

even a FIG. a in DE 287. In addition, the abstract of DE 827 discloses that a “*frame-to-frame comparison*” (see Abstract, line 4) is employed in order to reduce noise. The Abstract of DE 287 simply states that an estimated-value signal for the noise is calculated (6) from the difference (3) of a frame-to-frame comparison (1, 5) and the difference (4) between the noisy input signal (1) and the calculated estimated value signal (6). There is simply no disclosure of a calculation for determining a homogeneous picture region as set forth in claim 2.

In addition, DE 287 neither discloses nor suggests “*for the at least one detected homogeneous picture region (BR), measuring a high-frequency signal component (HP) contained in said picture signal;*”. (cl. 2). Again, DE 287 as understood does not teach determining a homogeneous picture region, and then measuring a high frequency signal component therein. The Official Action contends this feature of claim 2 “*...is met where the pattern is subjected to high-pass filtering (abstract) in order to eliminate the DC component.*” (Official Action, pg. 3). However, the abstract for DE 287 never even uses the term high-pass filtering.

A 35 U.S.C. §102(e) rejection requires that a single reference teach each and every element of the claimed invention. For at least any of the reasons set forth above, DE 287 is incapable of anticipating claim 2.

3. Claim 2 currently stands rejected for allegedly being obvious in view of the combined subject matter disclosed in published U.S. application 2001/0055421 to Baatz et al (hereinafter “Baatz”) and U.S. Patent 5,329,311 to Ward et al (hereinafter “Ward”).

The Official Action contends “*it would have obvious to one of ordinary skill in the art at the time of the invention to modify Baatz which discloses a method to obtain the homogeneity of a picture by also filtering/determining the amount of noise present in the picture, in order to produce a noise free picture.*” (Official Action, pg. 4). This rejection is improper for several reasons.

The Official Action states “[t]hus the examiner incorporates Ward, which discloses that since TV pictures have frequencies concentrated in the central portion of the spectrum and do not spread to the very high frequency portion, a high pass filter (106) is used to obtain the random noise within the picture.” (Official Action, pg. 4). This statement in the Official Action has little to do with the claimed invention – the claimed invention measures the high frequency signal component, and from the high frequency signal component provides a noise signal indicative thereof. That is, the claimed invention DOES NOT use a high pass filter to recover random noise within the picture. Therefore, even if Baatz is modified as alleged, there is simply no teaching of record that discloses or suggests “*for at least one detected homogeneous picture region (BR), measuring a high frequency signal component (HP) contained in said picture signal;*” and then “*determining the noise contained in the picture from the high-frequency signal component (HP) and providing a noise signal indicative thereof.*” (emphasis added, cl. 2). The Official Action by its own admission states Ward uses a high pass filter to recover random noise within the picture, NOT the **high-frequency** signal component as recited claim 2.

In addition, Baatz is not even directed to a system that processes an image to determine noise within the image. Baatz relates to a system for radar and medical image processing (e.g., see Baatz ¶¶[0173] and[0177]. Specifically, Baatz states “[a] particularly strong point resides in the segmentation of textured pictures or data records, for example radar or X-ray pictures,...” (emphasis added, Baatz ¶[0173]). In addition, Baatz states “[t]he method is excellently suited for the processing of satellite and aerial pictures, or all kinds of medical images, namely of all two-dimensional as well as three-dimensional picture generation methods,...” (emphasis added, Baatz ¶[0177]). Therefore, it is respectfully submitted that Baatz is not even in the field of the claimed invention.

Furthermore, even if Baatz is amended as suggested the resultant system would no longer operate as a system for segmenting of a digital image for use in satellite image processing, aerial image processing or medical image processing.

For all the foregoing reasons, reconsideration and allowance of claims 1-6 is respectfully requested.

If a telephone interview could assist in the prosecution of this application, please call the undersigned attorney.

Respectfully submitted,



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